

Notice of Allowability

Application No.

10/798,846

Applicant(s)

YAMAMOTO ET AL.

Examiner

Art Unit

Jean B. Jeanglaude

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 02-02-05.
2. ☒ The allowed claim(s) is/are 1-30.
3. ☒ The drawings filed on 11 March 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Jean Bruner Jeanglaude
Jean Bruner Jeanglaude
Primary Examiner

Reasons For Allowance

Claims 1 – 30 are allowable.

1. The following is an examiner's statement of reasons for allowance: in combination with other limitations of the claims the prior arts made of record fail to suggest an information encoding apparatus and method for encoding N pieces of information comprising a scrambled information generation section for applying, to each of N pieces of information, one corresponding scrambling pattern among the M scrambling patterns so as to generate N pieces of scrambled information. Also, in combination with other limitations of the claims the prior arts made of record fail to suggest an information re-encoding apparatus and method for re-encoding a plurality of pieces of first encoded information into a plurality of second encoded information wherein the information re-encoding apparatus and method comprise a third scrambling pattern generation section for performing an arithmetic operation on the plurality of first scrambling patterns with respect to the plurality of second scrambling patterns by a second arithmetic operation, so as to generate a plurality of third scrambling patterns; a scrambled information generation section for performing an arithmetic operation on the plurality of third scrambling patterns with respect to the plurality of pieces of first scrambled information by the first arithmetic-operation, so as to generate the plurality of pieces of second scrambled information; and an encoded information generation section for supplying the plurality of pieces of second scrambled information with the plurality of second parities, so as to generate the plurality of pieces of second encoded information; wherein the arithmetic operations performed by the first arithmetic

operation and the second arithmetic operation fulfill (AoB) * B=A, where \circ represents a first operator representing the arithmetic operation to be performed by the first arithmetic operation: the * represents a second operator representing the arithmetic operation to be performed by the second arithmetic operation, and A and B each represent an arbitrary value.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
3. Sako et al. (US patent Number 5,901,127) discloses a data recording method and apparatus, data record medium and data reproducing method and apparatus.
4. Coakeley et al. (US Application Number 10/117,208) discloses systems and methods for high speed serial encoding and decoding for data and control interfaces.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Jeanglaude whose telephone number is 571-272-1804. The examiner can normally be reached on Monday - Friday 7:30 A. M. - 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Tokar can be reached on 571-272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jean Bruner Jeanglaude
Primary Examiner
February 22, 2005